

MODELS 540PSL AND 540PSH

SWITCHING POWER SUPPLY CARDS

The Models 540PSH and 540PSL Power Supply Cards are components of the IED Model 540 Ambient Analysis System. They are switching mode power supplies, each with 3 DC voltage outputs. The input voltage range of the 540PSL is 105 - 130 VAC, and the 540PSH is 210 - 260 VAC. They are designed to plug into the 540M Mainframe and supply power to the 540CPU, 540IAC, and 540I function cards which also are housed in the 540M Mainframe.

The 120 W 540PSL and 540PSH produce +15 VDC at 3 A, -15 VDC at 3 A, and +30 VDC at 1 A. The +15 V and -15 V and the AC line are fused for overload protection.

Power on/off switch, indicators, and test jacks are located on the front edge of the card for easy access. The on/off switch controls the AC line. The three green LEDs illuminate when their respective DC outputs are operational. Test jacks are provided for each DC output and for the common ground point so that the outputs can be monitored conveniently during setup and maintenance operations.

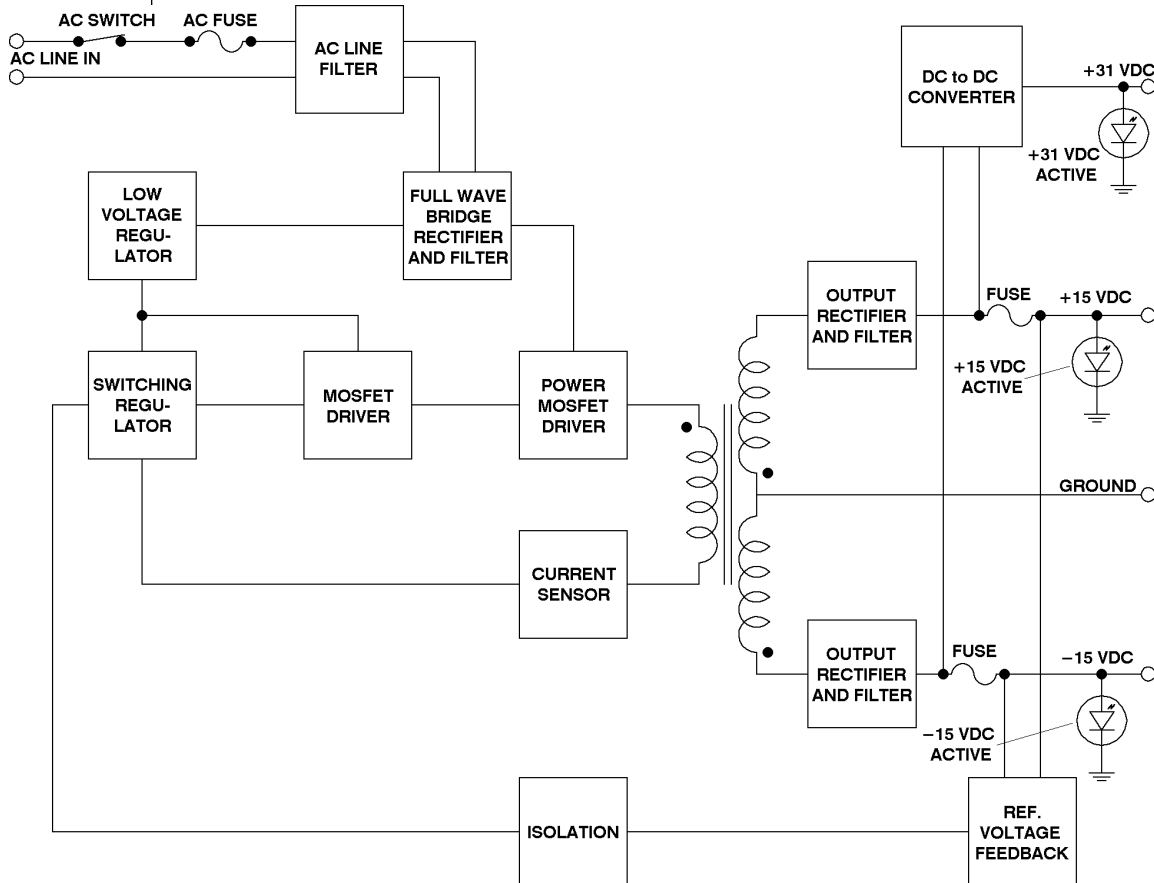


Figure 1 - 540PSL and 540PSH Power Supplies
Block diagram



SPECIFICATIONS

ELECTRICAL, ANALOG

1. AC Input Voltage	
540PSL	105 - 130 VAC
540PSH	210 - 240 VAC
2. Input Line Frequency	50 - 400 Hz
3. DC Output Voltage	
Output 1	+15 VDC, 3 A
Output 2	-15 VDC, 3 A
Output 3	+31 VDC, 1 A
4. Output Voltage Adjustment Range, (+15 V and -15 VDC, only)	10%
Factory preset to voltages in item 3 above, field adjustment not recommended	
5. Efficiency, (min)	70%
6. Output Power Limiting	130 W
7. Output Voltage Overshoot at Startup	0 V
Soft start	
8. Switching frequency (Fixed)	75 kHz
9. Peak Noise, Ripple and Spikes, (max)	150 mV

INDICATORS

1. Supply Active	
+15 VDC	Green LED
-15 VDC	Green LED
+31 VDC	Green LED

CONNECTORS

1. Input	44-pin card edge connector
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MECHANICAL

1. Size (maximum overall dimensions as viewed from the front)	
Height	(11.4 cm) 4.5
Width	(5.1 cm) 2.0
Depth	(33.3 cm) 13.1
2. Weight	(647 gm) 1.43 lb

ENVIRONMENTAL

1. Operating Temperature Range	(+32 °F - +104 °F) 0 °C - +40 °C
2. Storage Temperature Range	(-40 °F - +158 °F) -40 °C - +70 °C

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